

What is claimed is:

1 1. A conductive gasket for providing a low-impedance contact  
2 between a first surface and a second surface, said gasket  
3 comprising:

4       a flexible cover for contacting the first surface on an  
5 exterior face of said conductive cover when said gasket is  
6 compressed;

7       a contact strip disposed on an anterior face of the  
8 conductive cover and having a plurality of protrusions disposed  
9 thereon for improving contact between said gasket and said first  
10 surface when said gasket is compressed; and

11      a conductive path between said second surface and at least  
12 one of said flexible cover and said contact strip for providing a  
13 low-impedance path between said first surface and said second  
14 surface when said gasket is compressed.

1 2. The conductive gasket of Claim 1, wherein said contact strip  
2 is a metal contact strip and said protrusions are conductive  
3 projections from an exterior face of said contact strip facing  
4 said anterior face of the conductive cover, and wherein said  
5 conductive projections pass through said flexible cover when said  
6 gasket is compressed.

1 3. The conductive gasket of Claim 2, wherein said conductive  
2 cover is a wire mesh, whereby said conductive projections pass  
3 through said wire mesh by displacing said wire mesh when said  
4 gasket is compressed.

1 4. The conductive gasket of Claim 2, wherein said protrusions  
2 extend through said conductive cover when said gasket is  
3 uncompressed and pass further through said flexible cover when  
4 said gasket is compressed.

1   5. The conductive gasket of Claim 2, wherein said flexible cover  
2   includes a plurality of perforations therethrough and aligned  
3   with said projections, whereby said conductive projections pass  
4   through said perforations when said gasket is compressed.

1   6. The conductive gasket of Claim 2, wherein said flexible cover  
2   is a flexible plastic strip having a conductive coating on at  
3   least said exterior surface.

1   7. The conductive gasket of Claim 1, further comprising a  
2   compressible foam layer disposed on an anterior face of said  
3   contact strip facing away from said anterior face of said  
4   flexible cover for applying force to said contact strip when said  
5   gasket is compressed.

1   8. The conductive gasket of Claim 7, further comprising a second  
2   compressible foam layer disposed on an exterior face of said  
3   contact strip between said contact strip and said flexible cover  
4   for maintaining a shape of said gasket.

1   9. The conductive gasket of Claim 1, wherein said compressible  
2   foam layer is a conductive foam layer, and wherein said  
3   conductive path is provided by contact between said contact strip  
4   and said second surface via contact between said contact strip  
5   and said conductive foam and further provided by contact between  
6   said conductive foam and said second surface.

1   10. The conductive gasket of Claim 1, wherein said protrusions  
2   bend said flexible cover, but do not penetrate said flexible  
3   cover when said gasket is compressed, whereby electrical contact  
4   with said first surface is improved by bends in said flexible  
5   cover.

1 11. The conductive gasket of Claim 1, wherein said conductive  
2 path is provided by contact between said contact strip and said  
3 second surface.

1 12. The conductive gasket of Claim 1, wherein said flexible cover  
2 is a conductive cover, and wherein said conductive path is  
3 provided by contact between said cover and said second surface.

1 13. The conductive gasket of Claim 1, wherein said contact strip  
2 is a metal contact strip and said protrusions are conductive  
3 projections extending from both an exterior face and an anterior  
4 face of said contact strip, wherein said conductive projections  
5 pass through said flexible cover when said gasket is compressed,  
6 and wherein said protrusions extending from said anterior face  
7 provide at least a portion of said conductive path via contact  
8 with said second surface.

1 14. The conductive gasket of Claim 1, wherein said contact strip  
2 is a first metal contact strip, said protrusions are first  
3 conductive projections extending from an exterior face of said  
4 contact strip, wherein said first conductive projections pass  
5 through said flexible cover when said gasket is compressed, and  
6 further comprising:

7 a second metal contact strip disposed at a predetermined  
8 angle greater than zero in an axis perpendicular to a  
9 longitudinal extension of said gasket and having second  
10 conductive projections disposed on an exterior face thereof,  
11 wherein said flexible cover is further disposed over said second  
12 metal contact strip, and wherein said second conductive  
13 projections pass through said flexible cover to contact said  
14 second surface when said gasket is compressed.

1    15. The conductive gasket of Claim 1, wherein said contact strip  
2    is in the form of a cylindrical conductor, and wherein said  
3    protrusions extend radially from a central axis of said  
4    cylindrical conductor.

1    16. A conductive gasket for providing a low-impedance contact  
2    between a first surface and a second surface, said gasket  
3    comprising:

4         a wire mesh cover for contacting the first surface on an  
5    exterior face of said conductive cover when said gasket is  
6    compressed;

7         a contact strip disposed on an anterior face of the  
8    conductive cover and having a plurality of protrusions disposed  
9    thereon for penetrating said wire mesh cover when said gasket is  
10   compressed;

11        a first compressible foam layer disposed on an anterior face  
12   of said contact strip facing away from said anterior face of said  
13   flexible cover for applying force to said contact strip when said  
14   gasket is compressed;

15        a second compressible foam layer disposed on an exterior  
16   face of said contact strip between said contact strip and said  
17   wire mesh cover for maintaining a shape of said gasket; and

18        a conductive path between said second surface said flexible  
19   cover, whereby a low impedance is established between said second  
20   surface, said wire mesh cover and said contact strip when said  
21   gasket is compressed.

1 17. A method for manufacturing a conductive gasket, said method  
2 comprising:

3 forming a contact strip having a plurality of protrusions  
4 disposed thereon for improving electrical contact of said gasket  
5 when said gasket is compressed; and

6 covering said contact strip with a flexible cover to form  
7 said gasket, whereby said protrusions pass through said flexible  
8 cover when said gasket is compressed.

1 18. The method of Claim 17, wherein said covering comprises  
2 wrapping a wire mesh cover around said contact strip.

1 19. The method of Claim 17, further comprising placing said  
2 contact strip over a compressible foam layer prior to said  
3 covering, and wherein said covering covers said compressible foam  
4 layer and said contact strip.

1 20. The method of Claim 17, further comprising forming  
2 perforations in said flexible cover prior to said covering,  
3 whereby said protrusions pass through said perforations in said  
4 cover.